

Masanori KUSUNOKI  
Serial No.: 09/805,284  
Filed: March 13, 2001  
Page 2

Dkt. 2562/64498

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (previously presented) An access authentication system for providing a client with a service of connection to a second terminal server via a first terminal server, characterized by comprising:

a first authentication server for determining whether or not the client should be connected to the first terminal server, on the basis of personal information input by the client to the first terminal server, the first authentication server creating first ticket data by encoding a client parameter, which includes part of the personal information, on the basis of a summarization using a one-way function, and transferring the first ticket data to the second terminal server as well as the client parameter; and

a second authentication server for detecting whether or not the client parameter is valid and whether or not the first ticket data has been used, creating second ticket data by encoding the client parameter on the basis of a summarization using a one-way function, comparing the first and second ticket data, and supplying the second terminal server with data indicative of whether or not the second terminal server should be connected to the client;

wherein the client parameter includes at least one of ID information of the client, an access-originator IP address, and an expiration date set for the first ticket data; and

the first and second authentication servers includes a common character string which is predetermined when creating the first and second ticket data and which is changed at a predetermined point in time.

Masanori KUSUNOKI  
Serial No.: 09/805,284  
Filed: March 13, 2001  
Page 3

Dkt. 2562/64498

Claims 2-5 (canceled).

6. (previously presented) An access authentication system for providing a client with a service of connection to a second terminal server via a first terminal server, characterized by comprising:

a first authentication server for determining whether or not the client should be connected to the first terminal server, on the basis of ID information and a password input by the client to the first terminal server, the first authentication server creating first ticket data by encoding client parameters, which include the ID information, an access-originator IP address of the client, a predetermined expiration date and a common character string, on the basis of a summarization using a one-way function, and transferring the first ticket data to the second terminal server as well as the client parameter; and

a second authentication server for comparing an access-originator IP address input by the client to the second terminal server with the access-originator IP address of the client included in the client parameter, thereby determining whether or not access by the client has been executed on or before the expiration date, determining whether or not the first ticket data has been used, creating second ticket data by encoding the client parameters on the basis of a summarization using a one-way function, comparing the first and second ticket data, and supplying the second terminal server with data indicative of whether or not the second terminal server should be connected to the client;

wherein the first and second authentication servers include a common character string which is predetermined when creating the first and second ticket data, and which is changed at a

Masanori KUSUNOKI  
Serial No.: 09/805,284  
Filed: March 13, 2001  
Page 4

Dkt. 2562/64498

predetermined point in time.

7. (previously presented) An access authentication system for providing a client with a service of connection to a second terminal server via a first terminal server, characterized by comprising by comprising:

first personal information acquiring means for acquiring first personal information input by the client to the first terminal server;

first authentication means for determining whether or not the client should be connected to the first terminal server, on the basis of the first personal information;

first ticket data creating means for creating first ticket data by encoding a first client parameter, which includes part of the first personal information, on the basis of a summarization using a one-way function;

transfer means for transferring the first ticket data to the second terminal server;

second personal information acquiring means for acquiring personal information input by the client to the second terminal server; and

second authentication means for creating second ticket data by encoding the second client parameter, which contains the part of the second personal information, on the basis of a summarization using a one-way function, comparing the first and second ticket data, and supplying the second terminal server with data indicative of whether or not the second terminal server should be connected to the client;

wherein the first ticket data creating means and the second authentication means include a common character string which is predetermined when creating the first and second ticket data, and which is changed at a predetermined point in time.

Masanori KUSUNOKI  
Serial No.: 09/805,284  
Filed: March 13, 2001  
Page 5

Dkt. 2562/64498

Claims 8 and 9 (canceled).

10. (original) The access authentication system according to claim 7, characterized in that the second authentication means judges validity of the first ticket data.

11. (original) The access authentication system according to claim 7, characterized in that the second authentication means judges legality of the client parameter.

Claims 12 and 13 (canceled).

14. (previously presented) A computer-readable storage medium that stores a program for operating a computer, the program being characterized by comprising:

first personal information acquiring means for acquiring first personal information from a client in a first terminal server;

first authentication means for determining whether or not the client should be connected to the first terminal server, on the basis of the first personal information;

first ticket data creating means for creating first ticket data by encoding a client parameter, which includes at least part of the first personal information, on the basis of a summarization using a one-way function, if the first authentication means determines that the client should be connected to the first terminal server;

transfer means for transferring the first ticket data to a second terminal server;

first ticket data acquiring means for acquiring the first ticket data in the second terminal server;

Masanori KUSUNOKI  
Serial No.: 09/805,284  
Filed: March 13, 2001  
Page 6

Dkt. 2562/64498

second personal information acquiring means for acquiring second personal information from the client in the second terminal server;

second ticket creating means for creating second ticket data by encoding a client parameter, which includes part of second personal information, on the basis of the summarization using a one-way function; and

second authentication means for comparing the first and second ticket data, thereby determining whether or not the client should be connected to the second terminal server;

wherein the first ticket data creating means and the second authentication means include a common character string which is predetermined when creating the first and second ticket data and which is changed at a predetermined point in time.

Claims 15 and 16 (canceled).

17. (previously presented) A program for operating a computer, comprising:

first personal information acquiring means for acquiring first personal information from a client in a first terminal server;

first authentication means for determining whether or not the client should be connected to the first terminal server, on the basis of the first personal information;

first ticket data creating means for creating first ticket data by encoding a client parameter, which includes at least part of the first personal information, on the basis of a summarization using a one-way function, if the first authentication means determines that the client should be connected to the first terminal server;

transfer means for transferring the first ticket data to a

Masanori KUSUNOKI  
Serial No.: 09/805,284  
Filed: March 13, 2001  
Page 7

Dkt. 2562/64498

second terminal server;

first ticket data acquiring means for acquiring the first ticket data in the second terminal server;

second personal information acquiring means for acquiring second personal information from the client in the second terminal server;

second ticket creating means for creating second ticket data by encoding a client parameter, which includes part of second personal information, on the basis of the summarization using a one-way function; and

second authentication means for comparing the first and second ticket data, thereby determining whether or not the client should be connected to the second terminal server-;

wherein the first and second ticket data creating means include a common character string which is predetermined when creating the first and second ticket data and which is changed at a predetermined point in time.

Claims 18 and 19 (canceled).

20. (previously presented) An access authentication method for providing a client with a service of connection to a second terminal server via a first terminal server, characterized by comprising:

a first authentication step of determining whether or not the client should be connected to the first terminal server;

a first ticket data creating step of creating first ticket data by encoding a client parameter, which includes at least part of personal information input by the client, on the basis of a summarization using a one-way function;

a data transfer step of transferring the client parameter and the first ticket data to the second terminal server;

Masanori KUSUNOKI  
Serial No.: 09/805,284  
Filed: March 13, 2001  
Page 8

Dkt. 2562/64498

a detection step of detecting whether or not the client parameter in the first terminal server is valid, and whether or not the first ticket data has been used;

a second ticket data creating step of creating a second ticket data by encoding the client parameter on the basis of a summarization using a one-way function;

a ticket data comparison step of comparing the second ticket data with the first ticket data; and

a second authentication step of determining whether or not the client should be connected to the second terminal server, on the basis of results obtained at the determination step and the comparison step;

wherein the first and second ticket data creating steps include a common character string which is predetermined when creating the first and second ticket data and which is changed at a predetermined point in time.

21. (new) The system of claim 1, wherein the client is contracted with the first terminal server for receiving services from the first terminal server, and the client is not contracted with the second terminal server for receiving services from the second terminal server.

22. (new) The system of claim 1, wherein the first authorization server transfers the first ticket data and the client parameter directly to the second authorization server without going through the client.